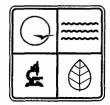
#### STATE OF MISSOURI

# DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION



PERMIT BOOK

# PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number:

042006 - 009

Project Number:

2006-02-005

Owner:

White Oak Gin Company Inc.

Owner's Address: P.O. Box 116, White Oak, MO 63880

Installation Name: White Oak Gin Company Inc.

Installation Address:

Highway 25, White Oak, MO 63880

Location Information: Dunklin County, S31, T20N, R10E

Application for Authority to Construct was made for:

Installation of a gin stand and feeder, two (2) lint cleaners, two (2) incline cleaners, a stick machine, and other associated equipment to increase production rate. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.

☐ Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions (listed as attachments starting on page 2) are applicable to this permit.

APR 1 9 2006

EFFECTIVE DATE

DIRECTOR OR DESIGNEE

DEPARTMENT OF NATURAL RESOURCES

#### STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional Office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed Special Conditions as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.

2006-02-005

White Oak Gin Company Inc.
P.O. Box 116, White Oak, MO 63880
White Oak Gin Company Inc.
Highway 25, White Oak, MO 63880
Dunklin County, S31, T20N, R10E

Installation of a gin stand and feeder, two (2) lint cleaners, two (2) incline cleaners, a stick machine, and other associated equipment to increase production rate. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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Project No.	2006-02-005

#### SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

White Oak Gin Company Inc. Dunklin County, S31, T20N, R10E

### 1. Superseding Condition

The conditions of this permit supersede all special conditions found in the previously issued construction permit (Permit Number 0796-009) from the Air Pollution Control Program.

#### 2. Emission Limitation

- A. White Oak Gin Company Inc. shall emit less than 30.0 tons of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) in any consecutive 12 month period from the entire installation (15.0 tons from current production increase and 15.0 tons from previous permit).
- B. White Oak Gin Company Inc. shall maintain an accurate record of PM<sub>10</sub> emitted into the atmosphere from the entire installation. Attachment A or an equivalent form shall be used for this purpose. White Oak Gin Company Inc. shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
- C. White Oak Gin Company Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 2.B indicate that the source exceeds the limitation of Special Condition Number 2.A.

#### 3. Cyclones

- A. The cyclones must be in use at all times when this plant is in operation and shall be operated and maintained in accordance with the manufacturer's specifications.
- B. White Oak Gin Company Inc. shall maintain an operating and maintenance log for the cyclone that shall include the following:

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#### SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- 1. Incidents of malfunction: with impact on emissions, duration of event, probable cause and corrective actions.
- 2. Maintenance activities: with inspection schedule, repair actions and replacements, etc.

# REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE SECTION (5) REVIEW

Project Number: 2006-02-005
Installation ID Number: 069-0010
Permit Number:

Complete: January 30, 2006 Reviewed: February 21, 2006

White Oak Gin Company Inc. Highway 25 White Oak, MO 63880

Parent Company: White Oak Gin Company Inc. P.O. Box 116 White Oak. MO 63880

Dunklin County, S31, T20N, R10E

**REVIEW SUMMARY** 

- White Oak Gin Company Inc. has applied for authority to construct a new Continental 161 Gin Stand and 9000 feeder and two (2) Continental 16D lint cleaners. In addition, replace two (2) incline cleaners and a stick machine with 10'
  - machines. Resulting from the larger equipment the fan sizes and pipe work will also be increased along with the cyclone bank to handle increased airflow.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- Cyclones are being used to control the particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub> from the new equipment are conditioned below de minimis levels.
- This installation is located in Dunklin County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

- Ambient air quality modeling was not performed since potential emissions of the application are conditioned below de minimis levels.
- Emissions testing is not required for the equipment.
- A Basic Operating Permit is required for this installation within 30 days of equipment startup.
- Approval of this permit is recommended with special conditions.

#### INSTALLATION DESCRIPTION

White Oak Gin Company Inc. operates a cotton ginning and fertilizer facility in White Oak, Missouri. The gin currently has two gin stands with a combined maximum design rate of 18 bales of cotton per hour. The gin is completely controlled by 1D-3D cyclones. The majority of the facility was "grandfathered", however the cotton gin has had many replacement/additions.

This facility has obtained one construction permit from the Air Pollution Control Program. Permit number 0796-009 has been issued for the construction of one (1) automatic feeder, one (1) unloading fan, two (2) lint cleaners, one (1) master trash fan, one (1) dryer heater, one (1) battery condenser and one (1) trash auger. The permit also limits the gin to less than de minimis ( $< 15.0 \text{ tons PM}_{10}$ ). The facility is a minor source in construction permits and an intermediate source in operating permits. Operation permit number OP2004-030 has been issued to White Oak Gin Company Inc.

#### PROJECT DESCRIPTION

White Oak Gin Company Inc. has applied for the authority to construct one (1) new Continental 161 Gin stand and 9000 feeder, two (2) Continental 16D lint cleaners, a 10' incline cleaner and stick machine, a 10' incline cleaner above conveyor distributor, and increase fan sizes and pipe work. The 8' incline cleaner and stick machine and 8' incline cleaner above conveyor distributor will be removed. The cyclone bank will be increased to handle the increased airflow. As stated in the submitted application, with these new additions the maximum hourly rate of the gin will be 33 bales per hour. The gin will be fully controlled by 1D-3D cyclones.

#### EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Chapter 9.7 *Cotton Ginning* (6/96). The existing potential emissions includes only the ginning equipment and does not include the fertilizer facility on site. Existing actual emissions are from the 2004 Emissions

Inventory Questionnaire (EIQ). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year).

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions*	Existing Actual Emissions (2004 EIQ)	Potential Emissions of the Application	Conditioned Potential of the Application	Installation Conditioned Potential
PM <sub>10</sub>	15.0	65.45	14.78	61.17	< 15.0	< 30.0
SOx	40.0	N/D	0.01	0.00	N/A	N/A
NOx	40.0	N/D	1.53	0.00	N/A	N/A
VOC	40.0	N/D	0.08	0.00	N/A	N/A
СО	100.0	N/D	1.28	0.00	N/A	N/A
HAPs	10.0/25.0	N/D	0.00	0.00	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

The project emissions are limited to less than 15.0 tons of  $PM_{10}$  in any consecutive 12 month period from the entire ginning installation. Record keeping will include the current projects emissions of 15.0 (i.e. 14.99) tons per year plus the existing permitted amount of 15.0 tons per year. The total of less than 30.00 tons of  $PM_{10}$  in any consecutive 12 month period from the entire ginning installation will be tracked via Attachment A using the emission factor of 0.876 pounds  $PM_{10}$  per bale of cotton produced. This emission factor includes the emissions from the ginning and haul road activity. A 12 month total of less than 30.00 tons of  $PM_{10}$  indicates compliance.

#### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub> from the new equipment are conditioned below de minimis levels.

#### APPLICABLE REQUIREMENTS

White Oak Gin Company Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

<sup>\*</sup> Existing potential emissions have be not been determined since some of the facility is "grandfathered". The PM<sub>10</sub> total includes only the cotton gin using current emission factors and does not include the fertilizer portion of the facility.

#### **GENERAL REQUIREMENTS**

- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110
  - The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions.
- Operating Permits, 10 CSR 10-6.065
- Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, 10 CSR 10-6.170
- Restriction of Emission of Visible Air Contaminants, 10 CSR 10-6.220
- Restriction of Emission of Odors, 10 CSR 10-3.090

#### STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Michael Sanchez	Date	
Environmental Engineer		

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 26, 2006, received January 30, 2006, designating White Oak Gin Company Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition.
- Southeast Regional Office Site Survey, dated February 7, 2006.

## Attachment A – PM<sub>10</sub> Compliance Worksheet

White Oak Gin Company Inc. Dunklin County, S31, T20N, R10E Project Number: 2006-02-005 Installation ID Number: 069-0010

Permit Number:	
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This sheet covers the period from _	to			
Copy as needed	(month, year)		(month, vear)	

copy as nee		(month, year)	(month, year)	
	Column 1	Column 2	Column 3	Column 4
Month	Monthly Amount of Cotton Bales (Bales)	PM <sub>10</sub> Emission Factor (Ibs/Bale)	Monthly PM₁₀ Emissions (Tons)	12-Month PM <sub>10</sub> Emissions (Tons/Year)
	Note 1	Note 2	Note 3	Note 4
		0.876		
		0.876		
		0.876		
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		0.876		

Note 1: Total number of bales produced.

Note 2: Composite  $PM_{10}$  emission factor. Includes haul road and ginning activity.

Note 3: Column 1 x Column 2 x 0.0005.

Note 4: Sum of last 12-months of Column 3\*.

<sup>\*</sup>A Ginning 12-Month Total PM<sub>10</sub> emissions total of less than 30.0 tons for Column 4 indicates compliance. (15.0 tons from current production increase and 15.0 tons from previous permit)

Mr. Robbie Winston Manager White Oak Gin Company Inc. P.O. Box 116 White Oak, MO 63880

RE: New Source Review Permit - Project Number: 2006-02-005

Dear Mr. Winston:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions, your new source review permit application and with your operating permit is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact me at (573) 751-4817, or you may write to me at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale New Source Review Unit Chief

KBH:msl

Enclosures

c: Southeast Regional Office PAMS File 2006-02-005

Permit Number: